BreazeHome 4.0 Custom Sort

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**Problem**
- BreazeHome is an academic project originated and lead by Dr. Masoud Sadjadi to help his students learn Agile Software Development in the context of a Web-based real-estate application that provides property information and services for home buyers, sellers, renters and realtors.
- BreazeHome would like to facilitate users the need of custom sort functionality to arrange properties based on desired attributes.
- The list of properties cannot be sorted in an ascending or descending order.

**Solution**
- Allow users to sort properties by one or more attributes.
- Implement a user friendly interface where the end user can select attributes and change the hierarchy used for sorting.
- Users may customize and manage the attributes included in the sort panel.

**Current System**
- There is no sort functionality implemented in the desktop version of the current system.

**Screenshots**
1. Properties list without sorting
2. Popup panel
3. Customize sort panel
4. Manipulating attributes
5. Attribute selected
6. Properties list sorted in ascending order

**Requirements**
- Properties list will be sorted based on the order of selected attributes in the popup panel.
- Properties list may be sorted in ascending or descending order.
- Displayed attributes can be managed and customized in a different panel.
- Popup panel will contain at least one attribute.

**System Design**

**Implementation**
- Database: PostgreSQL
- Web API: Django Rest Framework (Python)
- Desktop frontend: NodeJS, AngularJS, HTML, Bootstrap, SASS
- OS: Ubuntu Linux
- System used Model-View-Controller pattern with Client-Server architecture

**Sort Properties by price Sequence Diagram**

**Verification and Testing**
- Frontend: Selenium WebDriver.

**Summary**
- Properties will now be sorted based on user selection on the popup panel.
- Users will now sort properties by multiple attributes.
- Properties will now sorted ascending or descending order based on selected attributes.
- Users will be able to customize and manage the attributes based on their preferences.

**Acknowledgement**

The material presented in this poster is based upon the work supported by : Masoud Sadjadi, Yuzhou Feng, Hao Ren. I am thankful to the help that I received from my group members: Alex Dubuisson, Alexander Mohamer, Andreina Rojas, Andrew Christiano, Brandon Cajigas, Davi Guerra, Ethel Sierra, Elio Rosabal, Irma Castillo, Fernando Serrano, Jorge Cura, Lester Hernandez, Richard Roda and Ronny Alfonso.